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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,499	01/11/2001	Shunpei Yamazaki	07977/263001/US4563	2176

7590

02/26/2003

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EXAMINER

GOFF II, JOHN L

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 02/26/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/760,499

Applicant(s)

YAMAZAKI ET AL.

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 7-15, 20, 25, 31, 35 and 43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 16-19, 21-24, 26-30, 32-34 and 36-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 and 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species I-A, Figures 1-3 readable on claims 1-6, in Paper No. 8 is acknowledged. It is noted newly submitted claims 16-19, 21-24, 26-30, 32-34, and 36-42 are directed to Species I-A (Figures 1-3). Claims 7-15 are withdrawn from consideration as being directed to a non-elected invention.

2. Newly submitted claims 20, 25, 31, 35, and 43 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 20, 25, 35, and 43 are directed to non-elected Species I-B (Figures 4-6). Claim 31 is directed to non-elected Species II (Figures 7A-7C).

The originally presented invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 20, 25, 31, 35, and 43 are withdrawn from consideration as being directed to a non-elected invention.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 26-30 and 32-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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5. Claim 26 recites the limitation "the semiconductor element" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-6, 16-19, 21-24, 26-30, 32-34, and 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (U.S. Patent 5,821,138) in view of the admitted prior art (Specification pages 1 and 2) and Yamazaki et al. (U.S. Patent 5,757,456).

Yamazaki et al. ('138) are directed to a method of manufacturing a display device having a plastic substrate on its upper and lower surfaces (Figures 1-4). Yamazaki et al. teach the method comprises forming a peeling layer (e.g. a silicon oxide film) on a first substrate (e.g. glass) (Column 6, lines 50 and 61-62), forming an insulating layer (e.g. a silicon oxide film) on

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the peeling layer (Column 7, lines 38-39), forming a semiconductor element (e.g. active layers, a gate insulating layer, gate electrodes, a first interlayer insulating layer, wirings, and pixel electrodes) on the insulating layer (Column 8, lines 21-27, 31-35, and 57-58 and Column 9, lines 5-8), bonding a second substrate (e.g. plastic) to the semiconductor element using a first adhesive (e.g. epoxy resin, acrylate resin, polyimide resin etc.) (Column 9, lines 9-12 and 17-20), exposing the peeling layer to halogen fluoride to remove the peeling layer and the first substrate (Column 9, lines 25-26 and 40-42), and bonding a third substrate (e.g. plastic) to the insulating layer using a second adhesive to form a display device (Column 9, lines 53-56). Yamazaki et al. are silent as to a specific teaching of an example including a light-emitting element in the display device. However, Yamazaki et al. teach the method can be used to form a liquid display unit or an electro luminescence (EL) display unit (Column 6, lines 47-49). One of ordinary skill in the art at the time the invention was made would have readily appreciated modifying Yamazaki et al. to include a light emitting element as it was well known in the art that an EL display unit includes a light-emitting element as shown for example by the admitted prior art.

The admitted prior art is directed to known EL display devices. The admitted prior art teaches that an EL display device includes a light-emitting element (e.g. an anode, a cathode, and an EL material sandwiched therebetween) (Specification page 1, lines 15-25).

It is noted Yamazaki et al. '138 do not specifically teach a halogen fluoride gas to remove the peeling layer and first substrate. Absent any unexpected results, it would have been well within the purview of one of ordinary skill in the art to use a halogen fluoride gas to remove the peeling layers as halogen fluoride gas was a well known means for removing a silicon film as shown for example by Yamazaki et al. '456.

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Yamazaki et al. '456 are directed to a method of forming a display device wherein the device is formed on a peeling layer (silicon film) and a first substrate (Column 6, lines 24-25). Upon completion of the method Yamazaki et al. '456 teach using a halogen fluoride gas to remove the peeling layer and the first substrate (Column 4, lines 25-37 and Column 8, lines 6-8).

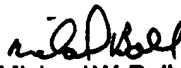
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


John L. Goff
February 21, 2003


Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700